

Correspondence

Disappearance of a deadly disease acute hepatomyoencephalopathy syndrome from Saharanpur

Sir,

Apropos our earlier correspondence¹, there has been a drastic reduction of the deadly disease affecting young children of Saharanpur district of western Uttar Pradesh (UP). The outbreaks of this unexplained acute brain disease in children was recurring every year, with very high (70-80%) fatality for over two decades. It was earlier known as “Saharanpur encephalitis” or “acute viral encephalitis of unknown origin”. However, it was later found not encephalitis, but a multi-system disease affecting liver, muscle and brain and re-named “acute hepatomyoencephalopathy (HME) syndrome” caused by phytotoxins². Later, the source of toxicity was found to be to the consumption of beans of a ubiquitous herb *Cassia occidentalis* by unsupervised young children of poor families^{3,4}. Cases occurred only in September through December every year coinciding with the poding season of this annual plant.

After publication of these studies, a meeting of all stakeholders that comprised paediatricians, general physicians, local health and district administrations, health agencies, and media representatives was conducted in 2007 at the district headquarter city of Saharanpur, the worst affected district. Later, the local unit of Indian Academy of Pediatrics, with support from the health agencies [mainly UNICEF and National Polio Surveillance Project (NPSP)], district administration, and media launched a massive educational campaign in and around Saharanpur district to educate people about the poisonous nature of the weed. Pamphlets in local language were printed and distributed; the ‘live weed’ was exhibited/displayed at the registration counters of all hospitals and nursing homes, frequently-visited government offices, and at other public places. The task of massive uprooting of the weed was taken by the forest and Public Works departments. Instructions were given to village ‘Pradhans’ to employ labourers for

destroying the weed from the neighbourhoods. Regular meetings were organized with ‘Gram Panchayat’ members and villagers were educated regarding the toxic nature of the plant. Media played a significant role in creating awareness among rural population. The entire operation was supervised by the district magistrate of Saharanpur. This massive campaign, sustained over 2 years led to drastic reduction in the number of cases in the district. As evident from the Table, the total number of admissions in Saharanpur district hospital which has a special ‘encephalitis ward’ to admit these cases, fell from 100-200 cases admitted annually up to 2007 to 15-30 in 2008 and 2009 and to nil in 2010.

There is an urgent need to carry out similar awareness/education campaigns in all other affected districts of western UP and Uttarakhand. The lessons learnt are that there is no substitute to systematic and professional investigation of any outbreak of unknown cause²⁻⁴. This experience deserves wider publicity and public understanding. Healthcare professionals both

Table. Numbers of admitted cases and deaths in Saharanpur District Hospital, 2002-2010

Year	Total cases	Deaths	Mortality (%)
2002*	79	57	72.2
2003	100	78	78.8
2004	159	114	71.7
2005	239	175	73.2
2006	105	74	70.5
2007	136	97	71.3
2008	15	8	53.3
2009	30	22	73.3
2010	0	0	-

*Cases only from November

Source: Adapted with permission from Ref. 1

in private and public sectors should have inquisitive mind and motivation to solve local problems by team approach. Public-private partnership in health sector can help achieving some difficult, unattainable targets. And, media can also play a very important constructive role in raising awareness among general public.

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